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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,767	11/06/2001	Chong-Sam Chung	1293.1242	4419
21171	7590	09/29/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			HUBER, PAUL W	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/985,767

Applicant(s)

CHUNG ET AL.

Examiner

Paul Huber

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 3-6,9,11,12,17,19,20,22-36,41-43,48 and 50-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,13-16,18,21,37-39,44-47,49,53 and 54 is/are rejected.
- 7) ☒ Claim(s) 10 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02062004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Applicant's election with traverse of Species I, figures 5 & 8, claims 1, 2, 7, 8, 10, 12-16, 18, 21, 37-40, 44-47, 49, 53 & 54 readable thereon, in the reply filed on August 19, 2004 is acknowledged. The traversal is on the ground(s) that there is no serious burden on Examiner if restriction is required. This is not found persuasive because the examiner has shown that there are at least 8 distinct species disclosed in the application which is considered an overly large number of species that would unduly burden the examination process were a restriction requirement not made. Accordingly, the restriction requirement is deemed proper and is maintained.

The requirement is still deemed proper and is therefore made FINAL.

Note: since elected claim 12 depends from nonelected claim 11, the claim 12 is drawn to a nonelected species and is withdrawn from consideration as being a claim which does not read on the elected Species I.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 7, 8, 13, 15, 18, 21, 37-39, 44, 46, 49 and 53 are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted Prior Art, as disclosed by the applicant in the specification on pages 2-4 in reference to figures 1-4.

The admitted Prior Art discloses an optical pickup, comprising: a light source 10 generating and emitting a light beam; an objective lens 17 focusing the light beam from the light source 10 to form a light beam on a recording medium 1; an optical path changer 11 disposed on an optical path between the light source 10 and the objective lens 17, altering a traveling path of the light beam incident on the recording medium 1; a light beam division and detection

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unit 25 dividing the incident light beam passed through the objective lens 17 and the optical path changer 11 after being reflected from the recording medium 1 into a first light beam portion A1 and a second light beam portion A2 around the first light beam portion A1, and detecting first and second detection signals from the first and second light beam portions; and a thickness variation detection circuit detecting a variation in thickness of the recording medium 1 by subtracting the second detection signal a2 from the first detection signal a1 and outputting a thickness variation signal St' indicative thereof. See page 3, line 25 through page 4, line 8.

Regarding claims 15 & 46, the optical pickup further includes: a collimating lens 13 on the optical path between the light source 10 and the optical path changer 11 collimating the light beam, which is diverging, from the light source 10; and a sensing lens 19 on the optical path between the optical path changer 11 and the light beam division and detection unit 25 condensing the incident light beam. Note: since the optical path is defined by the light beam traveling from the light source 10, reflecting from the medium 1 and becoming incident again upon the optical path changer 11, the collimating lens 13 is on the optical path between the light source 10 and the optical path changer 11 as claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14, 16, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted Prior Art, as disclosed by the applicant in the specification on pages 2-4 in reference to figures 1-4, as applied to the claims above, in further view of Matsuura (USP-6,510,111).

The admitted Prior Art discloses the invention as claimed, but fails to specifically teach that the optical path changer 11 is a beam splitter which transmits the light beam from the light source 10 and reflects the incident light

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beam reflected by the recording medium to the photodetector 25. Instead, the optical path changer 11 is a beam splitter which reflects the light beam from the light source 10 and transmits the incident light beam reflected by the recording medium to the photodetector 25. However, it is manifestly well known in the art of optical pickup devices as shown by Matsuura (see figure 1) that one can position the optical elements such that the beam splitter transmits the light beam from the light source and reflects the incident light beam reflected by the recording medium to the photodetector, for the purpose of design choice.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the admitted Prior Art such that the optical path changer 11 is a beam splitter which transmits the light beam from the light source 10 and reflects the incident light beam reflected by the recording medium to the photodetector 25, as claimed, well known in the art and as taught by Matsuura. A practitioner in the art would have been motivated to do this for the purpose of design choice.

Claims 1, 2, 7, 8, 13, 14, 21, 37-39, 44, 45, 49 and 54 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsuura (USP-6,510,111).

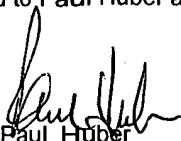
Matsuura discloses an optical pickup (see figures 1, 2 & 4), comprising: a light source 2 generating and emitting a light beam; an objective lens 6 focusing the light beam from the light source 2 to form a light beam on a recording medium 1; an optical path changer 4 disposed on an optical path between the light source 2 and the objective lens 6, altering a traveling path of the light beam incident on the recording medium 1; a light beam division and detection unit 11 dividing the incident light beam passed through the objective lens 6 and the optical path changer 4 after being reflected from the recording medium 1 into a first light beam portion ($A2 + B2 + A4 + B4$) and a second light beam portion ($A1 + B1 + A3 + B3$) around the first light beam portion, and detecting first and second detection signals from the first and second light beam portions; and a thickness variation detection circuit detecting a variation in thickness of the recording medium 1 by subtracting the second detection signal ($A1 + B1 + A3 + B3$) from the first detection signal ($A2 + B2 + A4 + B4$) and outputting a thickness variation signal THES indicative thereof. See col. 12, line 61 through col. 13, line 62.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee et al. and Yamada each disclose an optical pickup.

Claims 10 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication should be directed to Paul Huber at telephone number 703-308-1549.



Paul Huber
Primary Examiner
Art Unit 2653

pwh
September 26, 2004